

CLEAN COPY OF AMENDED ABSTRACT

A method for evaluating safety of a tracing program involves loading a byte code in a tracing framework, where the byte code includes instructions of the tracing program, validating the instructions when loading the byte code, performing one or more safety checks on the instructions while performing virtual machine emulation of the instructions, reporting an error condition and aborting virtual machine emulation of an unsafe instruction in the instructions when the safety check(s) detect(s) the unsafe instruction, and completing virtual machine emulation of a safe instruction in the instructions when the safety check(s) detect(s) the safe instruction, after aborting virtual machine emulation of the unsafe instruction.